

Take-Home Assignment: Manager, Marketing Operations and Analytics

Thank you for your interest in the Manager, Marketing Operations and Analytics position at Ververica; and congratulations for making it to the final Panel Interview. This take-home assignment is designed to assess your data skills and approach to key challenges in this role; as well as your presentation skills. Please complete the following tasks and submit your responses at least 24h before your panel interview.

The estimated time for this assignment is a **maximum of 4 hours**. Spending more time on it will not give you an advantage, as we do not expect you to present a particularly polished deliverable or a very deep, detailed analysis - we are more interested in assessing how you approach the problem, what you choose to focus on and what you decide to emphasize in your presentation. There is no single "correct solution" to this assignment.

The whole case and all its associated data are fictional, and will not be used outside of this recruitment process. You will retain all the rights to the materials you produce for this panel interview.

Background and Scenario

Ververica recently ran a (fictional) multi-channel marketing campaign to engage prospects and nurture them through to conversion. Your task is to analyze how various touchpoints contribute to advancing companies through the sales pipeline, assess campaign and channel effectiveness, and provide recommendations for improvement.

Two datasets are provided in CSV format:

Companies Table: Contains company-level information, including the company name, current status in the sales funnel, opportunity value (if applicable), and up



to five associated lead IDs.

Lead Touchpoints Table: Contains individual data points for every touchpoint with a lead. Each record corresponds to a single interaction (e.g., an email, social media engagement, or a search ad click) and includes the touchpoint ID, lead ID, a timestamp, the corresponding channel and the cost attributed to the touchpoint.

You can use any tool of your choice for analyzing the data and presenting the results.

Assignment Tasks

Data Analysis

Analyze the data provided and explain the influence of different factors in the campaign results.

Develop a (very basic) Attribution Model

Distribute credit for a conversion (e.g., moving a company from Prospect/MQL to a higher stage) across the different channels involved in a lead's touchpoint history. Present your assumptions and explain your choices.

Calculate financial performance

Calculate the conversion rates and average opportunity value by channel.

Determine the weighted contribution of each channel to moving companies through the sales funnel. Calculate cost-per-acquisition or cost-per-opportunity metrics.

Visualization

Create basic charts that illustrate the key performance metrics.

Define campaign success

For instance, consider overall conversion rate, average opportunity value, and cost efficiency.

Strategic Recommendations

Discuss what worked well in the campaign and what did not. Based on your analysis, propose recommendations for reallocating marketing resources among



channels. Suggest any tweaks to the campaign strategy—for instance, investing more in the channels that showed higher conversion and ROI.

Note: The dataset is synthetically generated, so feel free to explore the relationships that may or may not be present in the data. Don't expect it to make real-world sense.

Submission Instructions

Please submit your completed assignment in a single presentation document (PDF, Google Slides ot PPTX) to Ross Harrison and Jaime Lopez. If you wish, you can add a file or link a notebook or Github repository containing your analysis, but this is not mandatory. Include your name and the position you are applying for in the subject line.

We look forward to reviewing your responses and learning more about your approach to Marketing Operations and Analytics.

Thank you again for your interest in Ververica.